Conclusions: Implementing UTI care bundle and executing infection control procedures, combining daily assessment of line necessity and prompt removal of unnecessary lines were indeed helpful in lowering the UTI related infections.

PS 1-125

CONSTRUCTION AND TEST OF THE EFFECTIVENESS OF "CENTRAL VENOUS CATHETER BUNDLE CARE" FOR THE PREVENTION OF CENTRAL VENOUS CATHETER-RELATED BLOODSTREAM INFECTION

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Purpose: Bloodstream infectionis the second leading cause of community acquired infection in Regional Hospitals. TheCenters for Disease Control and prevention(CDC)publishedguidelinesonthe prevention ofbloodstream infectionsin 2011, which indicated thatBundle Care can effectively reducebloodstream infections.
Methods: Thestudy wasconducted in a1, 319-bededteaching hospital.Existingdata analysismethods was used. The compliance of medical staff was external audited by observation of members from infection control team withassistance of computersystems.
Results: From January 2013 to May 2014, a totalnumber of3,656 catheter was placed., After comparing the medical chart ID and date of infection, and exclusion of different isolates from one episode, the number catheter related blood stream infection during this period was 239 episodes. Owing to the variated numbers of catheters placed each month, to compare the distribution of infection rates. The result showed that the number of placed catheter increased, and the rate ofcatheter related blood stream infection went downward.
Conclusions: The study indicated that, the overall numbers of blood stream infectiondid not decrease after implementation of CVC care bundle. But the infection rate of patient-catheter based data showed a downward trend.

PS 1-126

IMPROVING ACCURACY OF IMPLEMENTING BLOODSTREAM INFECTION BUNDLE BY PROCESS REENGINEERING IN A NORTHERN REGIONAL HOSPITAL IN TAIWAN

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Purpose: Central line-associated bloodstream infection (CLABSI) is one of the common healthcare associated infections, which will lead to increased consumption of antibiotics and length of hospital stay, or even death if not properly treated. National Taiwan University Hospital Chu-Tung Branch has been enrolled in the Central Line Care Quality Improvement Plan of Centers for Disease Control, Taiwan since 2014 February. The accuracy of both central line care process and equipment accessibility was below 60% and that of hand hygiene was 63.3% in the first quarter auditing. The aim of this study was to improve accuracy of implementing bloodstream infection bundle by process reengineering
Methods: A task force was organized on April 4, 2014. Then literature searching, on-site survey, auditing, and root cause analysis were performed. Four major faults, including poor compliance of hand hygiene, non-familiarity of care process, no standard procedure of central line care, and lack of a fixed place for equipment needed in central line insertion, were found. The strategies of process reengineering are as follows: 1. Emphasis of hand hygiene; 2. Education and rehearsal of care process; 3. Formulation of care guideline; 4. Changing the working box to working car.
Results: After a campaign for improving care process was undertaken, the accuracy of both central line care process and equipment accessibility was raised to 100% and the accuracy of hand hygiene reached 96.6%.
Conclusions: The participation of Central Line Care Quality Improvement Plan can motivate all medical personnel. Therefore, the bloodstream infection bundle care can be put into practice accurately by encouraging each other between the staff in a hospital and via on-site survey and auditing by infection control nurses.

PS 1-127

THE EFFECT OF BUNDLE PLAN ON CENTRAL CATHETER-RELATED BLOODSTREAM INFECTIONS: A REGIONAL HOSPITAL EXPERIENCE

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Purpose: Invasive medical devices are necessary for clinical treatment, unfortunately it also **becomes** one of the major healthcare-associated infection risk factors. According to the annual surveillance data by Gan-dau hospital, central catheter-related bloodstream infections (CLABSI) rate in intensive care unit (ICU) was 5.92 ‰ and 5.05 ‰ during 2011 to 2012. **Comparison** with the Department of Disease Control, Ministry of Health and Welfare 2012 regional Hospital CLABSI data 1.9 ‰, Our data obviously higher and requires feather effort in reducing the infection rate .
Methods: By participating in quality improvement Bundle plan on 2013, there were 5 key components strictly embedded and carried out: hand decontamination pre-insertion, full sterile barrier precautions, 2% chlorhexidine for skin antisepsis, avoiding use of femoral site and removing unnecessary catheters. The period of intervention are 2 years.
Results: The major findings of this plan revealed two ways, **one at** ICU: the annual average catheter insertion period were 5.4 and 6.4 days, annual CLABSI rate were 0 (0/261) and 5.18‰ (1/193), hand hygiene compliance elevated from 74.7% to 89.5%; the other one was in general wards: annual CLABSI rate were 9.5‰ (2/211) and 0‰ (0/106), and the hand hygiene compliance improved 9.5%.
Conclusion: Education, training and operation audit could strengthen healthcare personnel sterile procedure and practice exactly in clinical treatment, reduce CLABSI rate, enhance safety and quality of care and thus reduce medical costs.

PS 1-128

THE RISK OF CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTION WITH FEMORAL VENOUS CATHETERS AS COMPARED TO NO-FEMORAL VENOUS CATHETERS

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Purpose: Taiwan Centers for Disease Control (Taiwan CDC) has promoted the CVC bundle care project for two years. For this project, the five modular measures of the CVC bundle of central line-associated prevention include hand hygiene, maximal sterile barrier precautions, using alcohol-based 2% chlorhexidine gluconate disinfectants, avoiding femoral venous catheters, and removing catheter as soon as possible. Medical personnel have to follow the above five modular measures in the central catheter placement and in daily care. Avoiding femoral venous catheters is always a difficulty during the course of promotion. Dialysis patients often implanted two central catheters (CVC and dialysis CVC). One is on the femoral vein. Therefore, the purpose of this study is to identify the correlation between the femoral or no-femoral venous catheters and central line-associated bloodstream infection (CLABSI).
Methods: 13 departments (7 ICUs and 6 wards) were invited to participate in this research. From January 2014 to October 2014 of 1264 CVCs, 805 (63.7%) had femoral venous catheters, 459 (36.3%) had no-femoral venous catheters. There were 105 CLABSIs. 79 (75.2%) had femoral venous catheters, 26 (24.8%) had a no-femoral venous catheter. Based on chi-square test, the event of CLABSI is statistically significant with the position of femoral venous catheters placement ($P=0.0102<\alpha=0.05$).
Conclusion: According to some papers, the CLABSI is not correlated with femoral venous CVC. However, the catheters were not placed over 5 days